

Shadow Lake Reclassification Petition



Shadow Lake Reclassification Petition



Petition Form Submittal Instructions

• If submitting via US post:

Mail to:

Lakes and Ponds Program
Watershed Management Division
One National Life Drive, Davis 3
Montpelier, VT 05620

- o Please submit a CD or flash drive for petitions that contain large files (1 MB or greater)
- Petitions can also be submitted via email to the following address:

<u>oliver.pierson@vermont.gov</u> with the Subject Line of "Reclassification Petition" or "Reclassification Application"

Petitioner Name - Individual or organization	Shadow Lake Association	1	
2. Address	Street/P.O. Box		
	PO Box 135		
	Town	State	Zip Code
	Glover	VT	05839
3. Phone	802-525-6227	·	
4. Email of contact person	jeniferbandrews@gmail.	com	
5. Petition Preparer Name	Jenifer B Andrews		
6. Co-Sponsors			

7. Waterbody Name(s)	Shadow Lake		
8. Portion of waterbody for petition	Location (add stream reach id if applicable)	Waterbody Coordinates (DD)	Elevation (ft.)
	From:	Latitude: 44.668N	1396′
	То:	Longitude: -72226W	



9. Petition Type (<i>Check</i>		Reclassification	X	Reclassification of	
one)	(strear	m / river)	la	ake	

Reclassification Only (#x)						
10. Water body Use	Use:	Proposed:	Current Use:			
proposed to be reclassified, current, and	☐ Aquatic Biota	A(1) □ A(2) □ B(2) □				
proposed classification. See Vermont Water	☐ Aquatic Habitat	A(1)□ A(2)□ B(2)□				
Quality Standards §29A- 306 for description of	X □ Aesthetics	A(1) x □ A(2)□ B(2)□	B(2)			
each use	☐ Fishing	A(1)□ A(2)□ B(2)□				
	Swimming	A(1)□ A(2)□ B(2)□	B(2)			
	☐ Boating	A(1)□ A(2)□ B(2)□				
	☐ Public Water Source	A(1)□ A(2)□ B(1)□ B(2)□				
Other	☐ Riparian Habitat	A(1)□ A(2)□ B(1)□				
	☐ Rare Species	B(2)□				
	☐ Significant Natural					
	Communities					
	☐ Upland Uncommon					
	Natural Community					
	☐ Highest Priority					
	Riparian Connectivity					
	☐ Exemplary Surface					
	Waters					
	☐ Highest Priority					
	Habitat Block,					
	Connectivity Block, and					
	Interior Forest Block					





Reclassification Criteria					
Reclassification Criteria	ication Criteria Aquatic Biota:				
11. List specific criteria	Biological criteria (see Appendix G. biocriteria for fish and macroinvertebrate				
per the Vermont Water	communities in Vermont wadeable streams and rivers - Vermont Water Quality				
Quality Standards (2017),	Standards, 2017)				
Environmental Protection	☐ Numeric water quality criteria (e.g., appended data records)				
Rule Chapter 29A	☐ Documentation of Rare, Threatened or Endangered species				
	☐ Documentation of Rare and Irreplaceable Natural Area or significant natural				
	community				
	☐ Documentation of numeric water quality chemistry (e.g., nutrient levels,				
	turbidity, dissolved oxygen levels, alkalinity, pH)				
	☐ Documented absence of toxic or radioactive substances				
	☐ Undeveloped riparian zones				
	☐ Limited human activity within the watershed				
	Aquatic Habitat:				
	☐ Natural Flow Regime (Documented attainment of hydrology and stream				
	protection criteria - § 29A-304 of the Vermont Water Quality Standards, 2017)				
	☐ Temperature (data appended)				
	☐ Documentation of Rare, Threatened or Endangered species				
	☐ Documentation of Rare and Irreplaceable Natural Area or significant natural				
	community				
	☐ Undeveloped riparian zones				
	☐ Limited human activity within the watershed				
	☐ Other Aquatic Habitat Assessments (Describe or append assessment used)				
	Aesthetics:"				
	□x Documented aesthetic qualities and characteristics				
	☐ Documented water characteristics, flows, water level, bed and channel				
	characteristics, and flowing and falling waters in their natural condition.				
	☐ Documented maintenance of level of water quality that provides for the				
	attainment and maintenance of the water quality standards of downstream				
	waters (for lakes only).				
	Recreational Fishing:				
	☐ Documented temperature in attainment with Cold Water Fish Habitat				
	criteria (for use in Wild Salmonid Stream re-classification petitions)				
☐ Documented temperature in attainment with Cold Water Fish H					
	criteria (temperature criteria in § 29A-302(B) of the Vermont Water Quality				
	Standard)				
☐ Measures of wild salmonid densities, biomass, and age composition					
	consistent with those expected in waters in their natural condition.				
	☐ Documented high incidence of accessibility to water				
	☐ Documented high use by anglers (i.e., fishing identified as existing use)				
	☐ Limited human activity within the watershed				
	☐ Upstream/ downstream use attainment				



Classification of waters designated, reclassification

Recreational Boating:
☐ Boating to the full extent naturally feasible without degradation due to
artificial flow and water level management or artificial physical impediments
☐ Boating to the extent feasible with no more than minor degradation due to
artificial flow and water level management or artificial impediments, and with
appropriate mitigation for artificial physical impediments
☐ Prospective waters shall comply with the Hydrology Criteria in § 29A-304 of
the Vermont water Quality Standards with respect to any flow alterations
☐ Areas where existing boating use has been determined to be present and
where, over some appreciable distance, certain features, free flowing water
and/or notable whitewater or flat-water boating opportunities are found.
Recreational Swimming:
☐ Prospective waters achieve and maintain a level of water quality
compatible with very good or excellent quality swimming and other primary
contact recreation with negligible risk of illness or injury from conditions that
are a result of human activities.
☐ Areas where existing swimming use has been determined to be present
that have consistent <i>E. coli</i> values below <i>E. coli</i> criterion and which, over some
appreciable distance, also possess certain high-quality features.
☐ Well-known locally or regionally as a swimming area;
☐ Documented pool(s) for swimming and/or water features that are
enjoyable for swimming or bathing including chutes, cascades, waterfalls,
cliffs, jumping rocks;
Public Water Source:
☐ Existing A(2) was never developed and/ or was developed but then
abandoned
or, prospective waters are currently managed, as necessary, for consistency
with use as a public water source. Where sustained direct contact with the
water occurs, waters shall be managed to achieve and maintain a negligible
risk of illness or injury from conditions that are a result of human activities,
or, prospective could be managed to achieve and maintain a uniformly
excellent character and a level of water quality highly suitable for use as a
public water source with filtration and disinfection or other required
treatment.



12. Purpose and need for reclassification – i.e., why is the change in classification now warranted? (summary)

Shadow Lake, Glover, is a jewel of a 210 acre lake which offers swimming and boating to Glover residents as well as neighbors from the towns that surround it and out-of-state visitors. Due to its maximum depth of 139 feet, it also offers excellent cold water fishing. Shadow is located in the Memphremagog Watershed and has a drainage basin of 5,310 acres. Although the water quality is outstanding which is (see Appendices) demonstrated through data that the Lay Monitoring and VIP reports and LaRosa water testing program data that Shadow Lake Association (SLA) collects, we notice that the total phosphorus concentration is increasing. Even though this is occurring, Shadow Lake continues to be a high quality oligotrophic body of water.

The SLA, supported by the Town of Glover and others, is requesting the reclassification of Shadow Lake from a B(2) to A(1) in order to protect it as a valuable water body in our community and state. Shadow has gained a place on the Watershed Action Plan list as worthy for study. There has also been a Lakewise program initiated that is in its third year. Shadow Lake Association, along with the Town of Glover and State funding, has managed a Greeter and Decontamination Station at the Fish and Wildlife Access since 2003. In partnership, the SLA, Northwoods Stewardship Center and the Town of Glover, installed two Raingardens at the town beach in order that we curtail road runoff which the SLA maintains. Even though there have been many projects to ameliorate both runoff and incoming phosphorus, we still find ourselves with significantly increasing total phosphorus concentration numbers, suggesting the need to increase protections for Shadow Lake and reverse these deteriorating trends.

Water Quality data, provided in the Appendix portion of this petition, shows that Shadow Lake meets DEC's data requirements for reclassification to A(1) for Aesthetics based on the Vermont Water Quality Standards Aesthetic Use Numeric Nutrient Criteria and the requirements in the Vermont Surface Water Listing and Assessment Methodology. These same Appendices provide the data for Shadow Lake water quality monitoring and also show mean annual values for all years.

The Town of Glover does not have any Zoning therefore, reclassification would mean that Shadow Lake could be protected and preserved into the future. With a lake association that implements many programs (Rain Gardens, Septic Socials as well as Lakewise and water quality measures), there are many committed people who will carry on this work.



Classification of waters designated, reclassification

13. Town(s) adjacent to	*Town of Sheffield- pending
proposed waterbody	*Town of Greensboro- pending
(append letters of	*Town of Barton- pending
support from	*Town of Albany-pending
municipality and/or	*Town of Glover
Regional Planning	*Memphremagog Watershed Association
Commission and/or	
Natural Resource	See attached Reclassification Support Letters
Conservation District	
and/or watershed	
organization	

14. Potentially interested	Additional information should be attached and listed in box 14.		
parties (abutting	~Northwoods Stewardship Center		
landowners, municipal	Meg Carter, 154 Leadership Drive, Island Pond, Vermont 05855 (802-723-		
and civic organizations,	6551)		
business interests, etc.)			
Provide names, address	~The Federation of Lakes and Ponds		
and phone numbers for	PO Box 766		
each party.	Montpelier, Vermont 05601		
	~Lake Parker Association		
	Brenda Plastridge, president		
	President@lakeparker.org		
	Glover, Vermont 05839		
	~Shadow Lake Association		
	PO Box 135		
	Glover, Vermont 05839		
	reclassification support letters - Google Drive		





15. Supporting	Required				
Documentation (maps can be created using the ANR Atlas) *required	 Map with location information and delineated area for petition with known public and private conserved land within the watershed Water quality monitoring data Map of Rivers and streams Map of lakes and Ponds 				
	Recommended				
	One-page document describing: Existing zoning or protection at town level that may preclude or support designation Additional map(s) that include: Watershed boundary current land use and waterbody encroachments, including roads and structures Water quality and quantity impacts, including wastewater and stormwater, physical alterations, and (if available) stream geomorphic condition Land parcels conserved				
16. List of supporting materials attached	List attachment by number with names and dates: (ex. 1. Map of Waterbody to be Reclassified 4/5/2017; 2. Photographs of Waterbody for Reclassification 4/5/2017; 3. One Page Supporting Document 4/10/2017)				
	 Map of shadow lake to be reclassified 2/5/22. Lay Monitoring Water Quality Data, 2011 – 2020 A(1) Comparison <u>COMPARISON .xlsx - Google Sheets</u> Shadow Lake ANR Lake Scorecard Bathymetry Map Letters of Support 				



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Lead Sponsor Information



Classification of waters designated, reclassification

Lead Sponsor Name: Jenifer Andrews				
80 Vanasse Road			Morristown	
Vermont	05661	802-888-3	3536	
jeniferbandrews@gma	ail.com			
Lead Sponsor Signatur	e:		Date:	
Co-Sponsor Signatures				
Name:				
Organization:				
Co-Sponsor Signature:			Date:	
Name:				
Organization:				
Co-Sponsor Signature:			Date:	
Name:				
Organization:				
Co-Sponsor Signature:			Date:	
Name:				
Organization:				



Co-Sponsor Signature:	Date:

DEC use				
Coordinates from / to of	From (lat/long)		To (lat/long)	
affected area				
Elevation	At mouth:		At source- end of blue line:	
Total drainage area km²		Drainage are		
at mouth or area of		proposed w		
standing water in acres Land use	% Natural	% Develope	.d	% Agricultural
	% Natural	% Develope	:u	% Agricultural
Available data to				
support specific use				
proposed reclassification				
Teciassification				
Bio site ID (RM as xx),	Bio Site ID		WBID	
WBID	2.0 0.00 12			
Map of waterbody,	Include attached map title below			
watershed and				
conserved lands in				
drainage				
Recommended				
Recommended Classification				